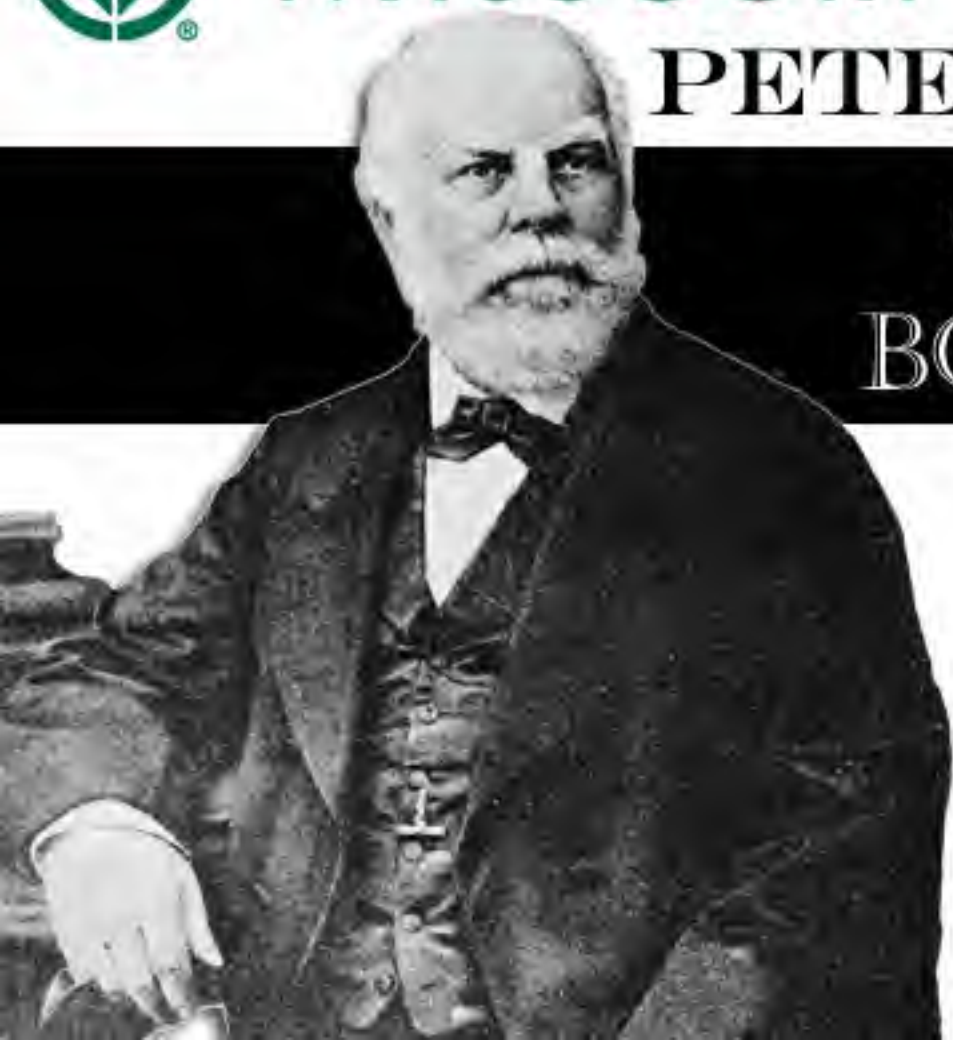


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BOTANICAL NOTEBOOKS



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Rec Jan 22<sup>d</sup>  
Ar — 26

Pittsington Dec  
Jan. 18<sup>th</sup> 1876

My Dear Dr. Engelman

I send by mail  
with this what I have taken for  
Abies Fraseri Pursh collected by  
myself on the Black Mts of North  
Carolina. This little tree (I did not  
see it over 400 ft high) covers the  
tops of the above range not ex-  
tending as I judge below an al-  
titude of 4000 ft. It is this tree  
which gives the peculiar color  
to the mountains ~~and~~ whence they  
get their name. I do not remem-  
ber to have noticed it upon the  
Roan Mt. the summit of which  
is a beautiful prairie!

I send the best specimens,



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12966

I haven't seen Tiedler for a long time. Am very  
brevity engaged in cheating Botany and my own comfort  
& pleasure by taking care of a broken down Railroad.

Yours very sincerely  
J. W. Tiedler

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I  
that  
thick  
leaves  
cover  
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better  
than



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I have left. I might state that under these trees which grow thickly together I found in the beautiful mosses which thickly covered the ground the nests of the Snow-bunting! I tried to pack one with the eggs in it and sent it by mail to J. Cooper for the Phila Acad. but the mountain road, were too much for it.

Thanks for your valuable paper on *Agaves* which I prize. What a man you are for taking hold of these unvarnished subjects, which would give any one else a cold sweat, if condemned to work them up. I haven't a doubt that when you were a student you lived Greek better than Latin and Hebrew better than Greek.



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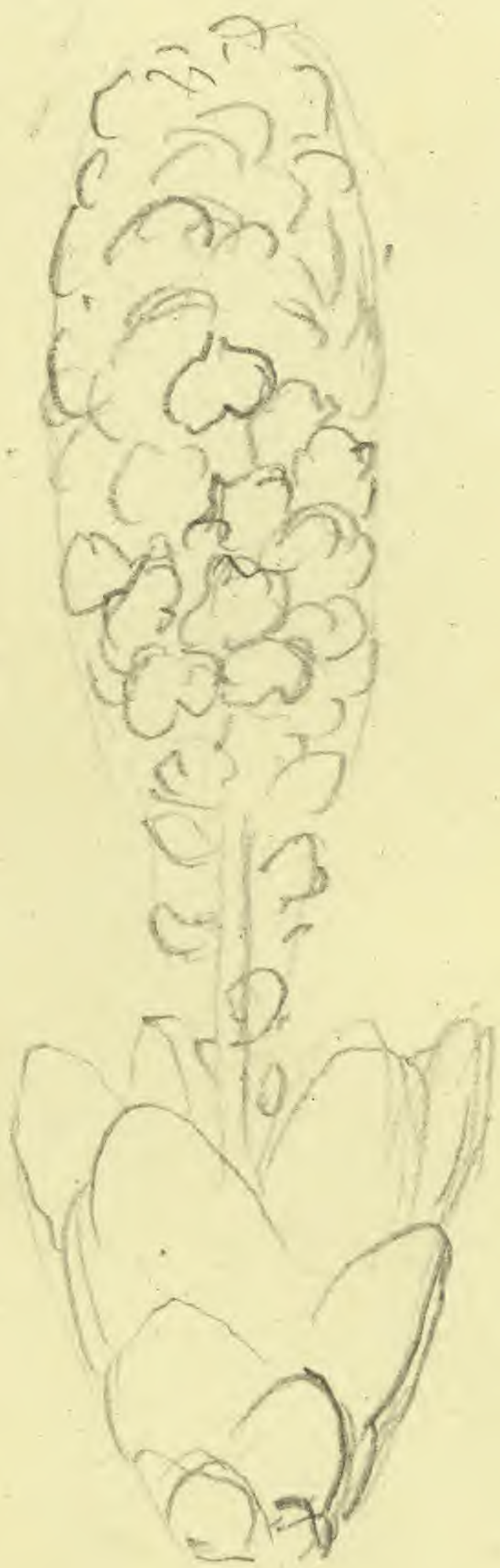
*Abies balsamea*

June 1863

H.B. Cambridge June 1863

deflex

x4



x10



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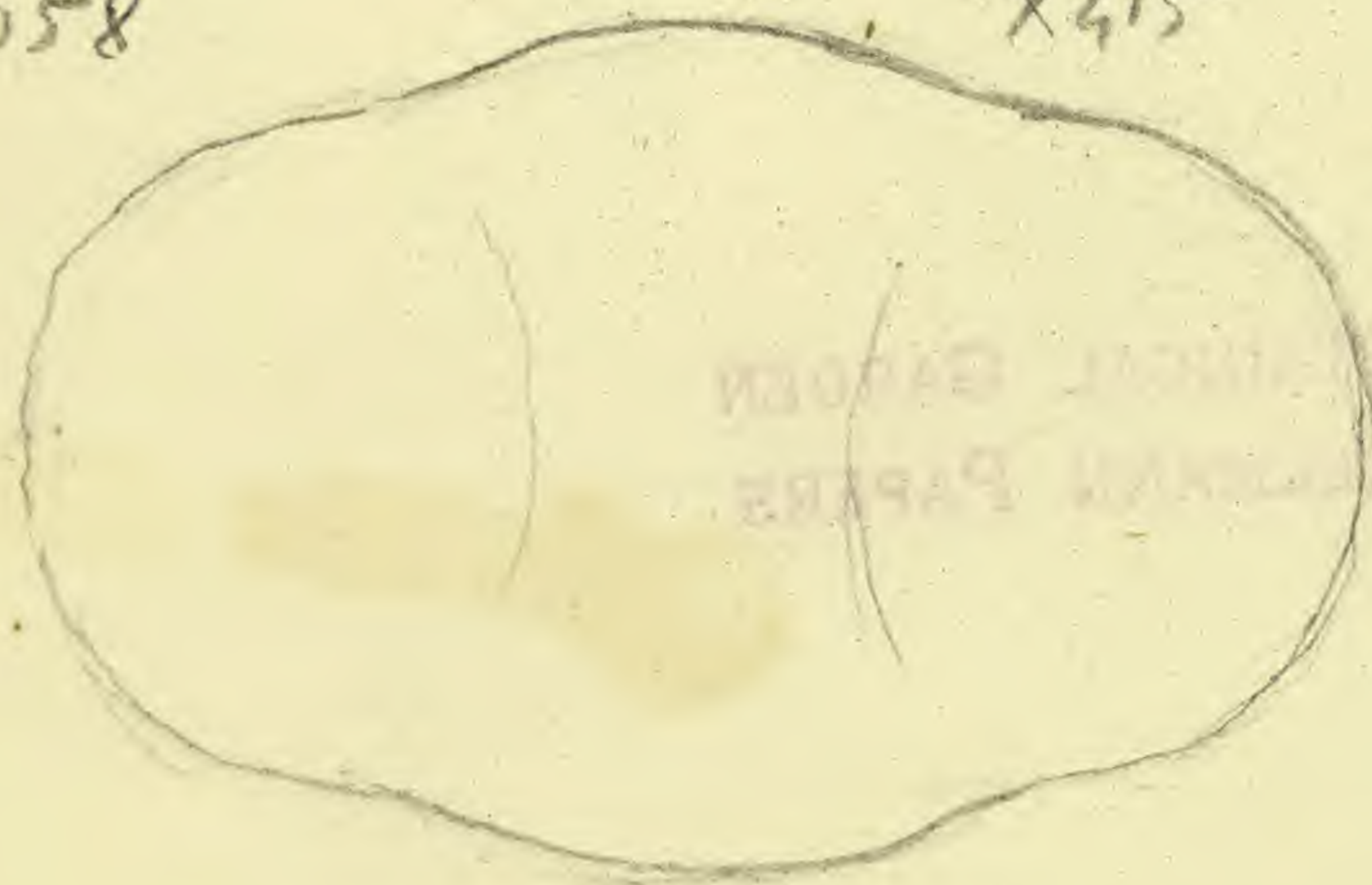
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X415

*Alnus balsamea*

Jan 1863

Chaddsford Pa



$$\frac{64 - 51.5}{415} = 0.10 - 0.12$$

0.051 - 0.059

57.5  
415  
1000



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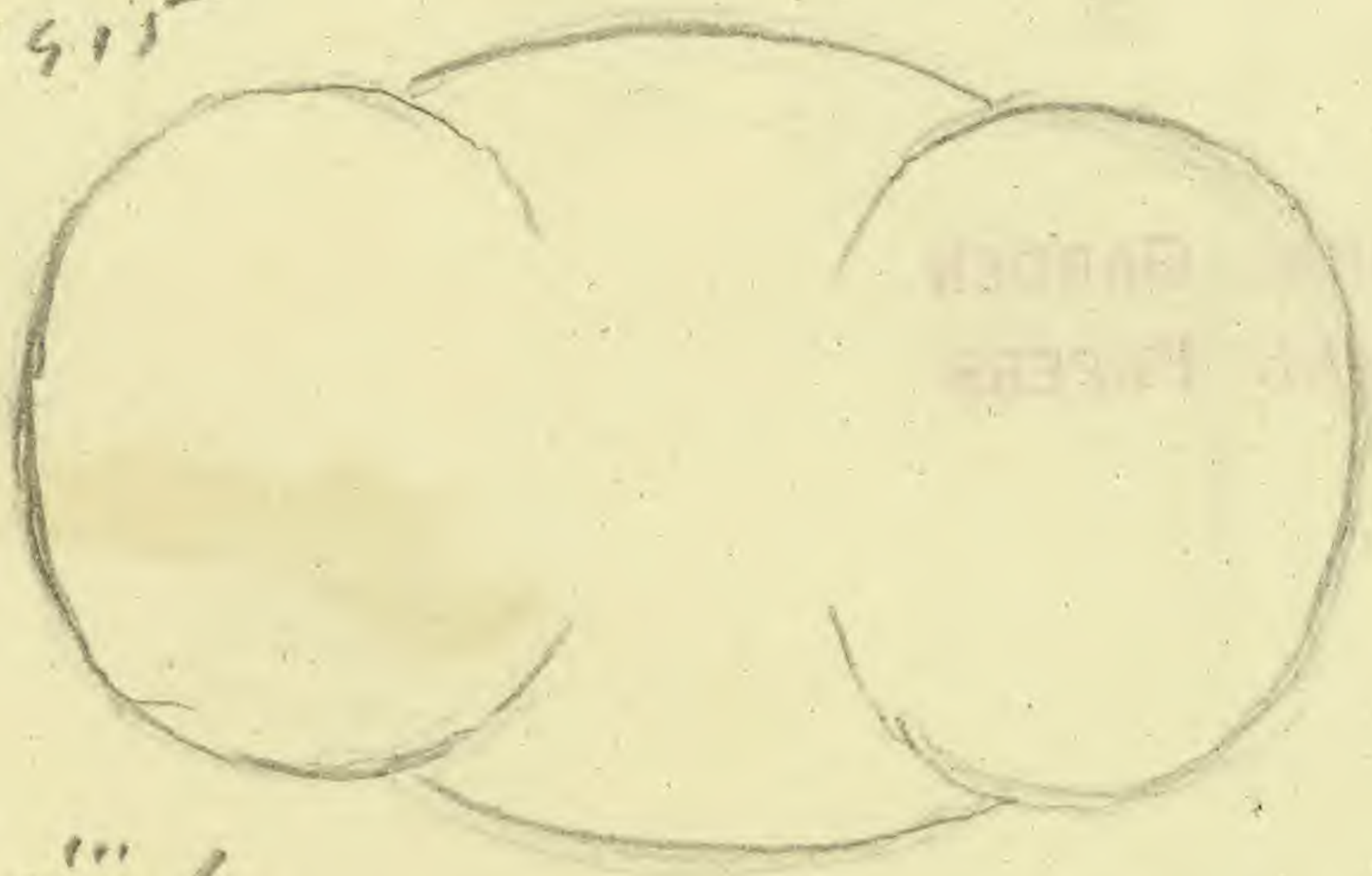


*Abies balsamea*

Jan 1865

x 915

Cambridge H. Bot. Jan



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51-54

415

= 0.12 - 0.13 u

540

415

1250 3

HERBARIUM OF THE UNIVERSITY OF CALIFORNIA



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about  $\times 10$



*Abies Balsamea*

Meigs Garden

April 24<sup>th</sup> 1859

bract, scale & 2 ovules seen  
from above —

ovule free & open below  
edge ragged —  
wing already formed,  
but adherent.

Bract pale green

Scale purple

wing deeper purple

ovule itself rose-colored



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Pollen  
soaked

x415

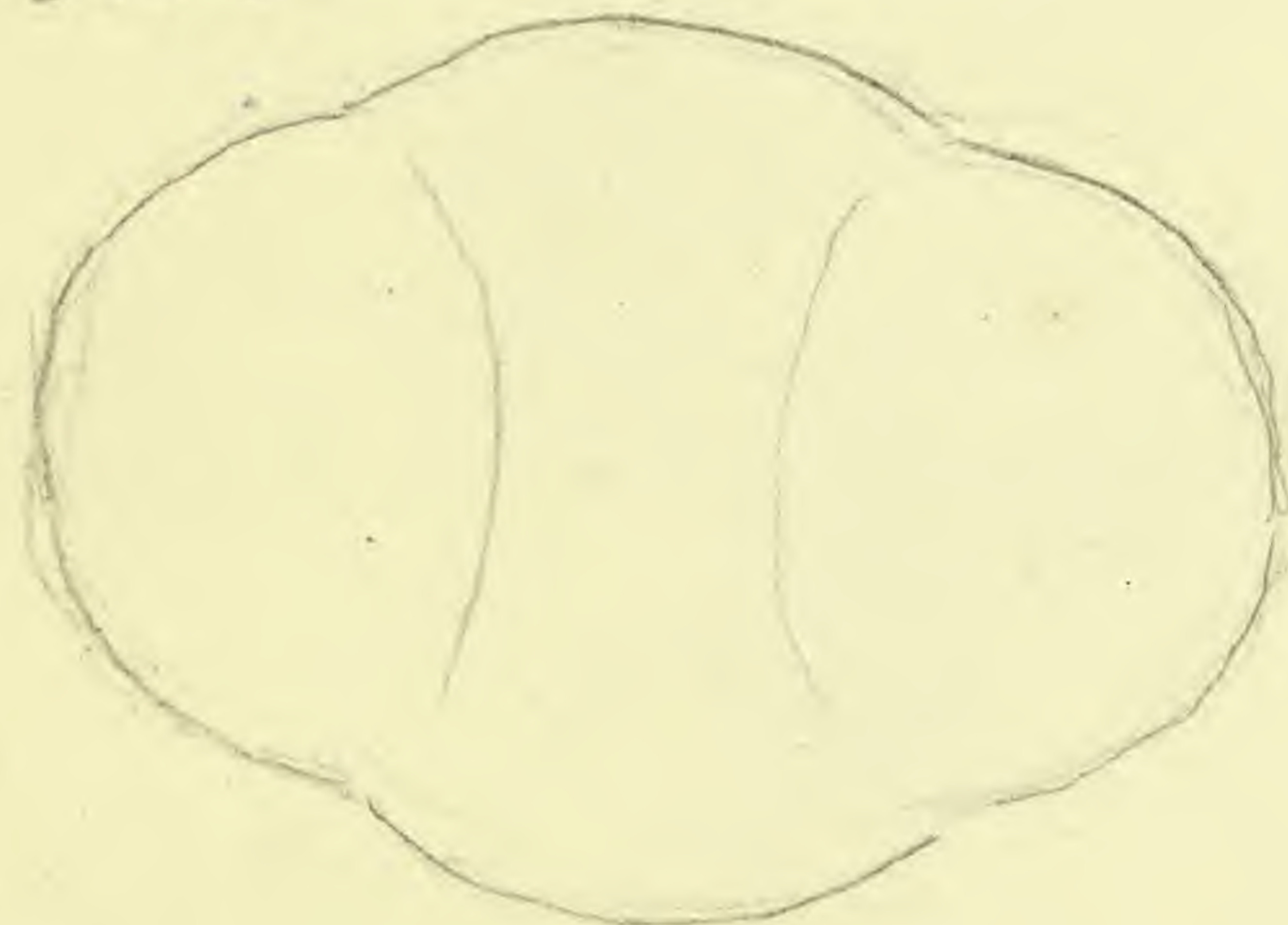
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= 0.12 mm



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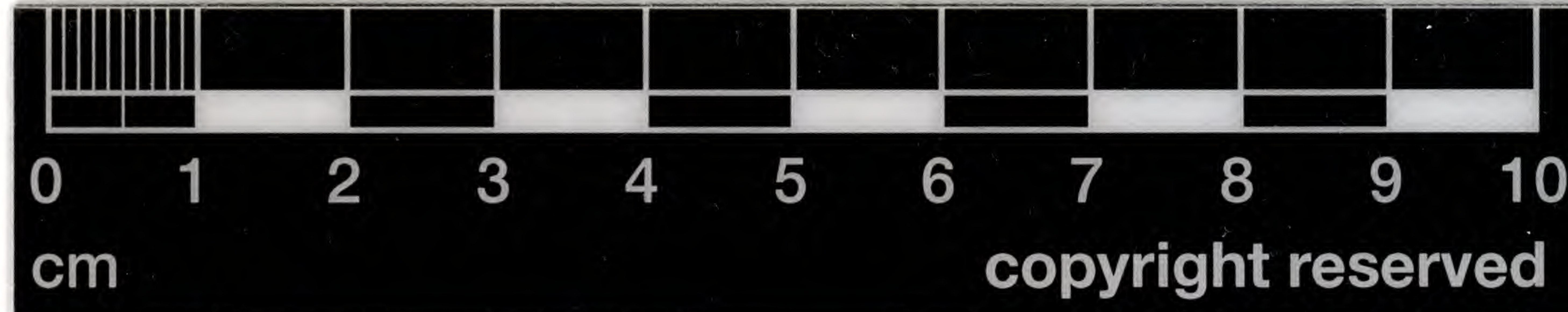


*Abies balsamea*  
Maine

June 1865

415 / 800 / 0.12  
415 / 415 / 0.11  
850  
415  
250

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PAGES 1-100



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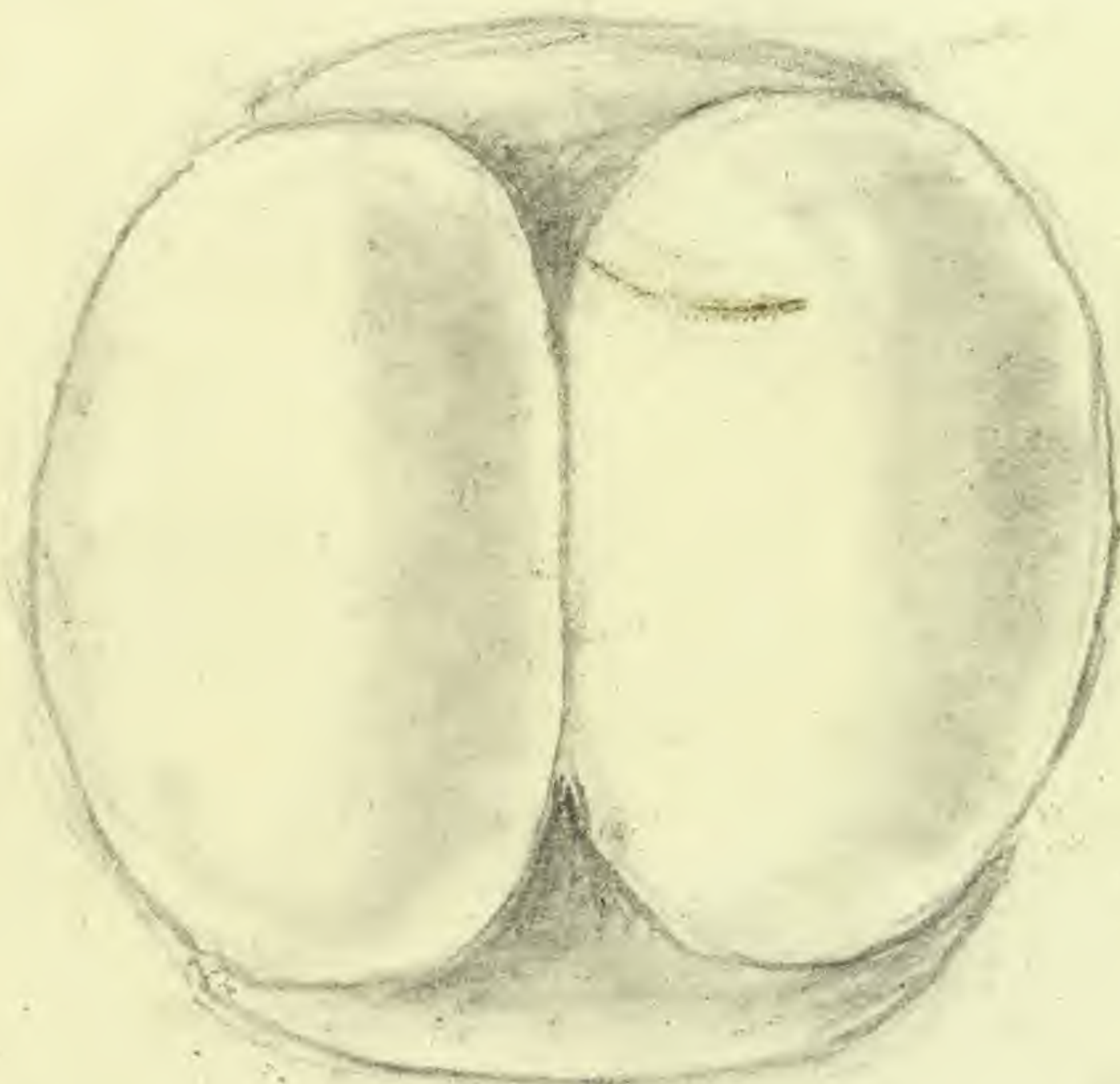


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Dry Pollen of *Abies balsamea* from Maine, seen by  
in different views

Light  
June 1863



MISSOURI BOTANICAL GARDEN HERBARIUM

ABIES BALSAMEA (MILL.) B.S.P.  
VILLOSA MILLER



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412

Alber. Fraseri ! 4 H

6

## STOVE AND TEMPERATE HOUSE (1875-76).

	s. d.
pt 9. Bougainvillea splendida . . .	2 6
or Brachychiton sumatranum . . .	2 6
t Brosimum Alicastrum . . .	8 "
or Brownea Ariza . . .	8 to 16 "
" — erecta . . .	8 to 20 "

or Calophyllum inophyllum . . .	8 "
" — Madruno . . .	1/8 to 8 "
t Calyptrium Aubletii . . .	8 "
or Campomanesia hypoleuca . . .	8 "
or Camptopus Manni . . .	12 "

Ducts same as  
balsameaall leaves flat,  
channell, non acutehypodermis layer complete  
above

8-12 lines of stomata on each

25-76 (abt 110) side below



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STOVE AND TEMPERATE HOUSE (1875-76).

5

	s. d.		s. d.
<i>g, t</i> 14. <i>Aristolochia clypeata</i> . . . . .	5	<i>t</i> <i>Bambusa stricta</i> . . . . .	8
" 1. — <i>cordifolia</i> . . . . .	3	" — <i>verticillata</i> . . . . .	12
" 2. — <i>Duchartrei</i> . . . . .	4	<i>or</i> <i>Barringtonia racemosa</i> . . . . .	2/6 to 8
(FLORE, XVIII, 35.)		" <i>Bertolonia guttata albo-punctatis-</i>	
		<i>sima</i> . . . . .	2
		" — <i>hyb. Marchandi</i> . . . . .	12
		" — — <i>Mirandae</i> . . . . .	24
		" — — <i>Van Houttei</i> . . . . .	40

" At what price will you sell the stock of your Bertolonia? was the newly made question of MM. Veitch and Williams, when they saw here the *Bertolonia Van Houttei*, raised from seed last year in this, for once, fortunate nursery. — Before parting however with any of these plants, I intend showing them in the opening of this season in the principal exhibitions of Great-Britain and Ireland in order to let the public see and judge for themselves of the extraordinary success achieved. At the Lille and Tournay Exhibitions, as well as here at Ghent, it has been awarded with gold medals, while at the Brussels Show, it was crowned with a *double gold medal*; but the winter came at the time of the proceedings in the nursery, and the plants were with the stock to be sold.



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*Abies Fraseri*

Dec 77

Roan Mtn Sept 8<sup>th</sup> 1876

Cones 2 to 2½ inches long  
1 inch thick

scales 15-18 mm wide 8-10 mm high  
= 8 : 5

leaves 5-6 mm long  
wing same length & width



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Office, 203 S. Fifth Street,  
Residence, 3003 Locust Street.



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- 1803 Michaux Fl. Bor Am. II. p. 207. Abies balsamifera ... "strob. oblongo-ovatis" —  
(Cand. x) "Grandfather Mountain N. Carolina". refers to A. Fraseri.
- 1816 Pursh, Fl. Am. Sept. II. p. 639 & Pinus Fraseri foliis solitariis planis brevioribus  
emarginatis subtus glaucis subsecundis supra crebris erectis, conis ovato-  
oblongis erectis, bracteis elongatis reflexis oblongo-ovatis emarginatis  
brevimucronatis iuriso - Induculatis. — High Mts of Carolina, Fraser  
Broadmountains, Pennsylv. Th. — Resembles balsam, differs in being  
a smaller tree, leaves shorter and more erect, cones not  $\frac{1}{4}$  the size
1818. Nuttall, gener. N. A. plants. 2. p. ~~A. Fraseri~~ Th. P. balsamea P. Fraseri Th. v. v.  
on the summit of the Catawba ridge, N. Carolina
- 1824 Elliott. Bot. S. Car. Gen. II. p. 639 P. balsamea — P. Fraseri of Pursh seems only  
to be a variety of this species!
- 1860 Chapman Fl. S. St. p. 434. Abies Fraseri "Pursh" — cones flattened obtuse or emarginate  
(6-8" long) cones 1-2" long.
- 1870 Gray Man. 1870 p. 472 Abies Fraseri Pursh — Mountains of Pennsylvania.  
Virginia and southward on the highest Alleghenies. Foliage etc  
nearly as in the last.
- 1868 Parlatore in DC. Prod. 16. 2 p. 419. P. Fraseri Pursh. ... in montibus allioribus Carolina  
(Fraser) et in Broad Mountains, Pennsylvania. ~~Th.~~ Abies Fraseri Lindl. Penny Cycl. 1. 5  
Link Linnaea 15. 531 (1841) Nuttall Sylva. 3. p. 139 f. 119.
- 1860 M. A. Curtis, Trees of N. Carolina in Jour. Survey of N. C. part 3. p. 26 Balsam Fir,  
A. Fraseri Pursh — seldom 40' high. & 12-14" diam, smaller than the Balsam fir.  
always above 4000' in N. C.
- 1841 Link in Linnaea 15. 531 Abies Fraseri Pinck. Wolan III. t. 38
- 1847 Endlicher Conif. 91. Pinus Fraseri Pursh Abies Lindl., Forby Pinck. Wol., Link Linnaea Pinck. Loud



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St Louis Jan 21<sup>st</sup> 1876.

Mr J. Eschme

to Dr Engelmann

to medical attendance on family in 1874 \$20. -

to do do 1875 ~~20~~ -

to do do on Mrs Coons to date 60 -

\$ 110. -



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# BUFFALO



# Lithia Water,

FOR DISEASES OF THE  
**URIC ACID DIATHESIS.**

ESPECIALLY

**Gout, Rheumatic Gout, Rheumatism,  
Stone or Gravel.**

Dr. HORATIO C. WOOD, Professor of Materia Medica &c.  
in the Medical Department of the University of Penn-  
sylvania, in the Medical Times of July, 20th, 1878:

"The Water of the Buffalo Springs, of Meeklenberg County, Virginia, was brought to our notice by a Baltimore physician, who had been relieved by its use of some very troublesome and alarming symptoms, believed to be due to an inherited gouty diathesis. Trial in one or two cases of inveterate chronic gout has afforded much satisfaction to us; free diuresis being pro-  
voked and followed by relief of symptoms

Doctor HARVEY L. BYRD, of Baltimore formerly Professor of Materia Medica and Thera-  
peutics, and of Principles and Practice of Medicine.

[EXTRACT FROM LETTER DATED BALTIMORE NOVEMBER 11th, 1879]

"My acquaintance with the Therapeutical properties of the Buffalo Lithia extends over  
several years, and in this city and also to the State of Maryland."



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*Abies amabilis*

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## TO THE MEDICAL PROFESSION.

MALTINE "is superior in therapeutic and nutritive value to any Extract of Malt made from Barley alone, or from any one variety of grain."

MALTINE "is nutritive to every tissue of the body from bone to brain." PROF. R. OGDEN DOREMUS. NEW YORK.

MALTINE "contains, unimpaired and in a highly concentrated form, the whole of the valuable materials which it is possible to extract from either malted Wheat, malted Oats or malted Barley." PROF. JNO. ATFIELD, LONDON.

"Wheat must be considered as by far the most nutritious of all grains."—*Physiology of man.*

PROF. AUSTIN FLINT, JR.

"Barley and Rye are inferior in nutritive of the other cereals." PROF. THOS. KIN LONDON.



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liar, they will greet him. On Orleans Island, they will mutely welcome him. On rounding steep promontory of Cape Dia some 362 feet above the vessel, looks up the mountain-like bluff will notice how gaily floats and



and nutritive value  
erley alone, or from

e of the body from  
MUS. NEW YORK.

On the margin of Orleans Island, they will mutely though lovingly welcome him. On rounding the Island, the steep promontory of Cape Diamond looms up some 362 feet above the vessel's deck. As he looks up the mountain-like bluff before him, he will notice how gaily floats and waves the green willow banners from the sides and summit of the steep and lofty promontory; the river front of old Quebec. If the voyager will land and scramble up the precipitous side he will find weeping willows bending over the monument where the gallant Montcalm fell. And if his enthusiasm prompts him to climb still higher, he will, on arriving at the Heights of Abraham, divide his attention between the monument which marks

with snow, but  
the winter is broken."

## CRACKING OF THE PEAR.

BY JACOB STAUFFER.

P. H. F. says, page 85, No. 3, for March, current volume of the *Monthly*: "I see by looking over the *Monthly*, 1860, page 94, a suggestion by Mr. Stauffer, the Entomologist, that the cracking of the pear might be owing to the larva of a very minute insect." Then puts the question, "What have you learned about the disease, and what is your opinion about the cause?" Your answer evades the direct question by saying that "knowledge of course progresses with the accumulation of new facts, and we hardly suppose in the light of new experiences Mr. Stauffer thinks



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Verbenas, the Poinsetta pulcherrima and many other things were continually spoken of in connection with Mr. Buist of Philadelphia, and when the writer of this determined to share his fortunes with American Horticulture, it was a matter of course to seek advice of Mr. Buist, and accordingly the lot was cast, and for which advice the writer has always been thankful.

Mr. Buist has now filled, by a full measure, his three-score years and ten, and though still comparatively strong, and in good health, will close up the business with which he has been so long and so honorably associated. Blest by Providence in numerous ways, but not in the particular one of a successor to the business—his only surviving son having as much as one man can do in the agricultural seed line—he naturally feels that he would like to see his pet plants comfortably settled while he has health and strength to look after them. More than this, the great city of Philadelphia, from which he ran years ago, and from whose grasp he hoped

houses, have been thinned out, but many remain. The Australian and other large tree ferns are indeed in considerable strength. The most beautiful departments are those perhaps devoted to Camellias and Azaleas. The last named have always been pets of Mr. Buist, and he has endeavored to let no occasion pass by which he might add any novelty that was a real improvement. They were just then in full flower, and, though it is not easy for a Florist to hold on to his plants long enough to make fine specimens, there were many among these which would do no injustice to a first class floral exhibition.

The Orchid house is a great attraction to all lovers of these curious plants. It was full of rare kinds, and many of them valuable as specimens, independently of their merit as scarce species.

Many a time when people are selling out they expect to find only the dregs and refuse of private sales. Those who visit Rosedale nurseries during this, the closing out season, with this idea, will be much disappointed.

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2. Grandes



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\* Virchow's Archiv, XLIV, p. 242. (September, 1868.)

† Lancet, N. Y. ed., August, 1868.

*Folia supra*<sup>6</sup>*atro viridia, in facie ramulorum*<sup>81</sup>  
*horizontalium superiore semi-cylindrica*  
*aggregata* (modo *Abietis Nordmannianae*  
*strobili majores*, ~~purpureo fasciculatis~~ ~~squarrosi~~ *obtus-oblongi subulato-*  
*cuspidati* more hypoleu- than *gracilis* (for *Michx.* 1877)



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the preceding experiments were made, taking from some the regular gray  
miliary tubercle, and the cheesy products from others. These products

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*At. grandis*

Oct 11 1875

var *ambilis*

leaves more crowded, not petiolate  
but hemispherical, lateral ones longer  
middle ones shorter - all

Dark green above, with short  
2 conspicuous white bands below.

leaves of fertile branches scutell  
or acute, short, thick.

Cones usually larger deep purple  
bract <sup>small</sup> elongated, oblong, not or scarcely  
emarginate (obovate) short cuspidate  
scale 25-28 mm wide, 17-22 mm high.

prop.  $2\frac{1}{2}$  - 3 : 2

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St. Louis,

187



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Ernest Fasold,  
PHARMACEUTIST,  
N. W. Cor. Park Ave. & 10th (or South) St.,  
ST. LOUIS.

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*Amblyotis Douglas*: vide Mr Nab 1877  
cult 1, H.B. Pinberg under this name  
ca 2, Plowton nurseries  
" 3, Knap Hill Nursery.  
native 4, St Juan Island - D Lyall 1858  
" 5, Lake Chilkweyak B.C. Cascade Mtns  
49° N. Lat. D Lyall 1859  
" 6, Cascade Mtns 49° N. Lat. to Fort Colville  
D Lyall; July 1860.

Herb. Esch. Jeffrey 409. Fraser River  
Sept 27. 1851

Syn. *lasiolepis* Balfour.  
*grandis* Murray, & probably *laevis*.  
*amblyotis* Douglas four gardens

Cone 4 inches by Jeffrey 409

Great development of Hypoderm!



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"*Abies amabilis*"

Sept 8 1870

in Mus Kew from A. Colville Esq  
(no locality)

"*A. amabilis*"

Oct 3 1875

A. Colville

Mus Kew 1869

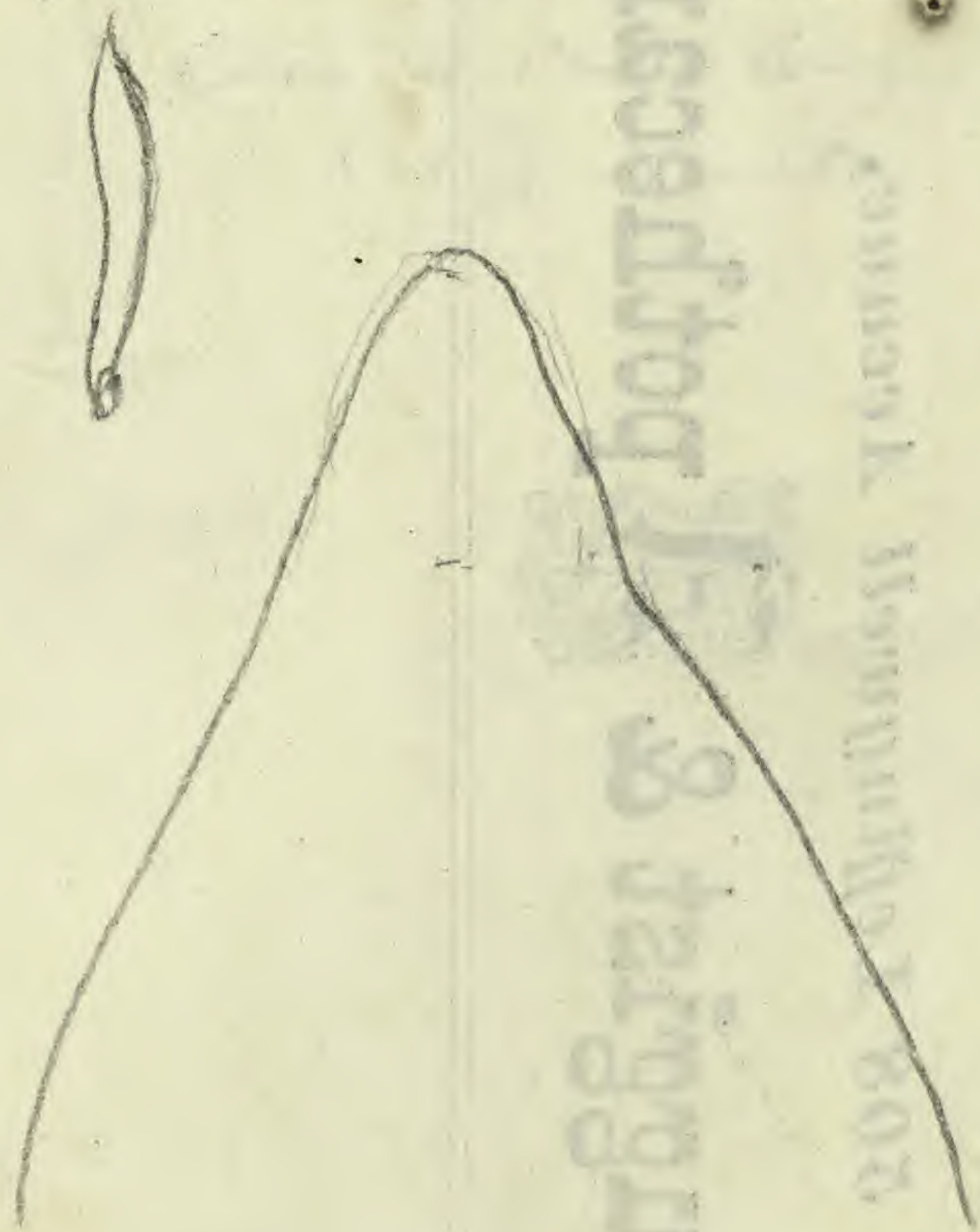
x10

band of stomata  
near tip

leaf just under cone



bands of stomata



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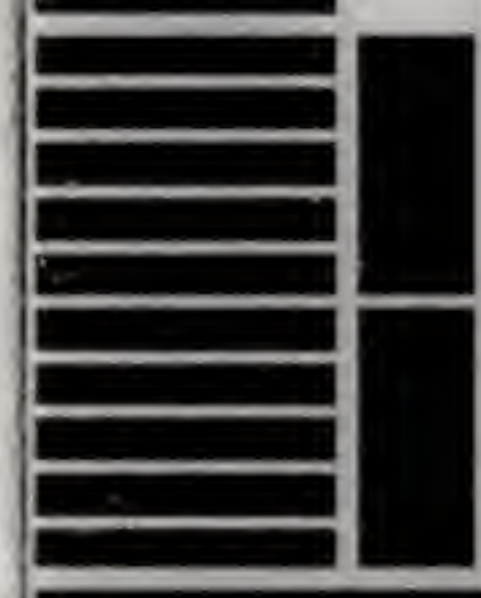


508 Leffingwell Avenue,  
**D**ruggist & **A**pothecary

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3003 LOCUST STREET.

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"*Abies amabilis*"

Sept 8 1870

in Mus Kew from St. Colville Esq  
(no locality)



scales  $20 \times 16$  mm

$= 3\frac{1}{4}$  in

cone 4 in long  
 $1\frac{3}{4}$  diam.



seed

$10 \times 4$  mm

$2\frac{1}{2}$  times as long as wide



leaves acute, obtuse or slightly notched on same branch  
white underneath - grooved above

Ruggist & Apothecary



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APOTHECARY & PHARMACEUTIST,  
Corner 4th & Olive Streets, St. Louis.

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